#### L # Search Text Time Stamp Hits Type DBs us-2004/12/07 ("5832165").pn. PGPUB; BRS L1 12:10 USPAT US-1 and grating\$1 near7 2004/12/07 2 BRS L2 PGPUB; (waveguide\$1 core\$1 claidd\$2) 12:11 USPAT 1 and grating\$1 near7 US-2004/12/07 (waveguide\$1 core\$1 claidd\$2 L3 PGPUB; BRS 12:11 film\$1) USPAT

## BEST AVAILABLE COPY

12/7/04, EAST Version: 2.0.1.4

	Comments	Error Definition	Erro rs
1			
2		•	
3			

	Туре	Hits	Search Text	
1	BRS	367	(waveguide\$1 near1 film\$1) same (waveguide\$1 film\$1) near7 refract\$4 near1 ind\$3	
2	BRS	83332	<pre>(waveguide\$1 film\$1) near7 refract\$4 near1 ind\$3 near3 (higher greater) near4 (substrat\$2 microplate plate micro adj1 plate) (transpar\$4 transluc\$3) near1 (microplate substrat\$1 micro adj1 plate plate)</pre>	
3	BRS	1693	(waveguide\$1 film\$1) near7 refract\$4 near1 ind\$3 near3 (higher greater) near4 (substrat\$2 microplate plate micro adj1 plate) (transpar\$4 transluc\$3) near1 (microplate substrat\$1 micro adj1 plate plate) same (diffract\$3 near1 grating\$1)	
4	BRS	61	S1 and S3	
5	BRS	793	<pre>(waveguide\$1 near1 film\$1) near7 refract\$4 near1 ind\$3 near3 (higher greater) near4 (substrat\$2 microplate plate micro adj1 plate) (transpar\$4 transluc\$3) near1 (microplate substrat\$1 micro adj1 plate plate) same (diffract\$3 near1 grating\$1)</pre>	
6	BRS	775	<pre>(waveguide\$1 near1 film\$1) near7 refract\$4 near1 ind\$3 near3 (higher greater) adj1 than adj4 (substrat\$2 microplate plate micro adj1 plate) (transpar\$4 transluc\$3) near1 (microplate substrat\$1 micro adj1 plate plate) same (diffract\$3 near1 grating\$1)</pre>	
7	BRS	0	<pre>(waveguide\$1 near1 film\$1) near7 refract\$4 near1 ind\$3 near3 (higher greater) adj1 than adj4 (transpar\$4 transluc\$3) adj1 (substrat\$2 microplate plate micro adj1 plate) same (diffract\$3 near1 grating\$1)</pre>	
8	BRS	0	<pre>(waveguide\$1 near1 film\$1) near7 refract\$4 near1 ind\$3 near3 (higher greater) adj1 'than' adj4 (substrat\$2 microplate plate micro adj1 plate) same (transpar\$4 transluc\$3) near1 (microplate substrat\$1 micro adj1 plate plate) same (diffract\$3 near1 grating\$1)</pre>	
9	BRS	0	<pre>(waveguide\$1 near1 film\$1) near7 refract\$4 near1 ind\$3 near3 (higher greater) adj4 (substrat\$2 microplate plate micro adj1 plate) same (transpar\$4 transluc\$3) near1 (microplate substrat\$1 micro adj1 plate plate) same (diffract\$3 near1 grating\$1)</pre>	
10	BRS	2	(waveguide\$1 near1 film\$1) near7 refract\$4 near1 ind\$3 near3 (higher greater) adj4 (substrat\$2 microplate plate micro adj1 plate) same (transpar\$4 transluc\$3) near1 (microplate substrat\$1 micro adj1 plate plate)	

11	BRS	0	S10 and (diffract\$3 near1 grating\$1)
		•	

	DBs	Time Stamp	Comments	Error Definition
1	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/02 20:11		
2	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/02 20:00		
3	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/02 20:02		
4	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/02 20:02		
5	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/02 20:03		
6	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/02 20:08		
7	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/02 20:06		
8	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/02 20:07		
9	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/02 20:09		
10	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/02 20:12		

US-PGPUB; USPAT; EPO;	2004/12/02 20-10	
JPO; DERWENT	2004/12/02 20:10	

	Errors	Ref #
1		S1
2		S2
3		S3
4		S4
5		S5
6		S6
7		S7
8		S8
9		S9
10		S10

<b>11</b> S11
---------------

	Туре	Hits	Search Text	
12	BRS	0	S10 and grating\$1	
13	BRS	1346	<pre>(waveguide\$1 near5 film\$1) same (waveguide\$1 film\$1) near7 refract\$4 near1 ind\$3</pre>	
14	BRS	2075	<pre>(waveguide\$1 film\$1) same refract\$4 near1 ind\$3 same (transpar\$4 transluc\$3) near1 (microplate substrat\$1 micro adj1 plate plate)</pre>	
15	BRS	7716	<pre>(waveguide\$1 film\$1) same (microplate substrat\$1 micro adj1 plate plate) same grating\$1</pre>	
16	BRS	28	S13 and S14 and S15	
17	BRS	28	S16 and (ind\$3)	
18	BRS	2	"6277330".pn.	
19	BRS	1	S20 and (film\$3 near3 waveguide\$1)	
20	BRS	2	"5999262".pn.	
21	BRS	1	S22 and (film\$3 near3 waveguide\$1)	
22	BRS	2	"5418871".pn.	
23	BRS	2	S24 and (film\$3 near3 waveguide\$1)	
24	BRS	2	"3806226".pn.	
25	BRS	2	S26 and (film\$3 near3 waveguide\$1)	
26	BRS	2	S26 and (film\$3 near7 waveguide\$1)	
27	BRS	22	("4608344" "3810688" "5195071" "3814498" "3806226" "4547262" "3839067" "5832165" "20020034457" "5684900").pn.	
28	BRS	16	S29 and (index\$2 indic\$2)	
29	BRS	7	("20020034457" "5832165" "5684900" "4608344" "3839067" "3814498" "3806226" "3839067").pn.	
30	BRS	16	("20020034457" "5832165" "5684900" "4608344" "3839067" "3814498" "3806226" "3839067").pn.	
31	BRS	3		
32	BRS	2	S33 and (index\$2 indices ssubstrat\$2) and (film\$3 near7 waveguide\$1)	
33	BRS	7	S32 and (index\$2 indices ssubstrat\$2 grating\$1) and (film\$3 near7 waveguide\$1)	
34	BRS	2	("20020034457" "5832165").pn.	

3 5	BRS	7	S32 and (index\$2 indices ssubstrat\$2 grating\$1 transp\$5 traslu\$5) and (film\$3 near7 waveguide\$1)
36	BRS	7	S32 and (index\$2 indices substrat\$2 grating\$1 transp\$5 traslu\$5) and (film\$3 near7 waveguide\$1)

	DBs	Time Stamp	Comments	Error Definition
12	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/02 20:10		
13	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/02 20:11		
14	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/02 20:17		
15	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/02 20:31		
16	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/02 20:18		
17	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 12:40		
18	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 11:18		
19	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 11:37		
20	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 11:37	•	•
21	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 11:54		
22	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 11:54		
23	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 12:32		
24	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 12:32		
25	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 12:33		
26	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 13:55		
27	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 14:10		
28	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 13:47		
29	US-PGPUB; USPAT	2004/12/06 13:54		
30	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 13:50		
31	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 13:54		
32	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 14:04		
33	US-PGPUB; USPAT; EPO JPO; DERWENT	2004/12/06 14:11		
34	US-PGPUB; USPAT	2004/12/06 14:11		

135	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/06 14:13	
13.6	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/06 14:29	

	Errors	Ref #
12		S12
13		S13
14		S14
15		S15
16		S16
17		S17
18		S20
19		S21
20		S22
21		S23
22		S24
23		S25
24		S26
25		S27
26		S28
27		S29
28	·	S30
29		S32
30		S31
31		S33
32		S34
33		S35
34		S37

35	S38
36	S39

	Туре	Hits	Search Text	
37	BRS	2	"5684900".pn. and (subst\$4 index indic\$3) same waveguide\$1	
38	BRS	0	"5684900".pn. and (subst\$4 near7 (glass\$1 silic\$5))	
39	BRS	1	"5684900".pn. and (substr\$4 near14 (glass\$2 silic\$5 si\$3))	
40	BRS	0	"3806226".pn. and (subst\$4 near7 (glass\$1 silic\$5))	
41	BRS	2	"5684900".pn.	
42	BRS	2	S44 and (subst\$4 near7 (glass\$1 silic\$5 si\$2 transpar\$4 translu\$5))	
43	BRS	1	"3806226".pn. and (subst\$4 near7 (glass\$1 silic\$5 si\$2 transpar\$4 translu\$5))	
44	BRS	2	("10020034457" "5832165").pn.	
45	BRS	1	S47 and (waveguide\$1 near7 grating\$1)	
46	BRS	2	S47 and (waveguide\$1 substra\$3 index\$2 indice\$1)	
47	BRS	1	("10020034457" "5832165").pn.	
48	BRS	1	("5832165").pn.	
49	BRS	1	S51 and (thermoplastic polyvinylidene fluoride polymethylpentene polyvinylidene Ruoude polmethylmethacrylate polmethyl methacrylate)	
50	BRS	0	S51 and (fluoropolymer fluoroacrylate)	
51	BRS	1	S51 and (grating\$1 same diffract\$5)	
52	BRS	1	S51 and (evanesc\$5 tail\$1 grating\$1 fundament\$4 mode\$1 modal film\$3 waveguid\$3 substrat\$3 light beam\$1 wave wavelength\$1)	
53	BRS	1	S51 and (evanes\$5 tail\$1 mode\$1 modal\$1 light beam\$1 sens\$5)	
54	BRS	1	S51 and (surface\$1 enhanc\$4 sensitiv\$5 sens\$5)	

	DBs	Time Stamp	Comments	Error Definition
37	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/06 14:53		
38	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/06 14:58		
39	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/06 14:58		
40	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/06 15:00		
41	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/06 14:58		
42	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/06 15:00		
43	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/06 15:24		
44	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/06 18:03		
45	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/06 17:50		
46	US-PGPUB; USPAT; EPO; JPO; DERWENT	2004/12/06 17:59	,	
47	US-PGPUB; USPAT	2004/12/06 18:03		
48	US-PGPUB; USPAT	2004/12/06 18:03		
49	US-PGPUB; USPAT	2004/12/06 18:11		·
50	US-PGPUB; USPAT	2004/12/06 18:14		
51	US-PGPUB; USPAT	2004/12/06 18:41	<u> </u>	
52	US-PGPUB; USPAT	2004/12/06 18:59		
53	US-PGPUB; USPAT	2004/12/06 19:21		
54	US-PGPUB; USPAT	2004/12/06 19:22		

	Errors	Ref	#
37		S40	
38		S41	
39		S42	
40		S43	
41		S44	
42		S45	
43		S46	
44		S47	
45		S48	
46		S49	
47		S50	
48		S51	
49		S52	
50		S53	
51		S54	
52		S55	
53		S56	
54		S57	

# This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

### **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

8
BLACK BORDERS
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
☐ FADED TEXT OR DRAWING
☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
SKEWED/SLANTED IMAGES
COLOR OR BLACK AND WHITE PHOTOGRAPHS
GRAY SCALE DOCUMENTS
☐ LINES OR MARKS ON ORIGINAL DOCUMENT
☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
OTHER:

### IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.